2 November 2017

Via ECFS

Marlene Dortch, Secretary Federal Communications Commission, Washington, DC

RE: Notice of Ex parte, Docket WC 17-59

Dear Ms. Dortch,

David Frankel held four meetings on 31-Oct as follows: David Grossman; Travis Litman; Jerusha Burnett, Kenneth Carlberg, Lauren Wilson, Kurt Schroeder, Karen Schroeder, John Adams, Kristi Thompson, Eric Burger; Eric Burger. On 02-Nov he met with Amy Bender.

All discussion focused on the materials already filed in this docket by ZipDX LLC. using the attached slides. Given that the pending Robocall Order will only nibble at the problem, ZipDX is advocating that the FCC catalyze a cooperative effort to develop rules for Originating Providers to: constrain the circumstances under which customers can make large volumes of calls and under which widespread spoofing is enabled; use the Charge Number information element (or the SIP equivalent) to label all calls as to their PSTN point of entry; and provide expeditious response to industry traceback queries.

Regards, /s/ David Frankel CEO, ZipDX LLC Monte Sereno, California 1-800-372-6535 / dfrankel@zipdx.com

cc: Meeting Participants, via E-mail

Stopping Robocalls @ The Source

David Frankel CEO, ZipDX LLC

dfrankel@zipdx.com



- Buyer of wholesale USA & int'l origination & termination
- Visibility to global inbound & outbound call signaling
- RespOrg, 499 Filer, CNAM & LNP Dipper, SMS Apps, etc.
- Past Participant in FCC Traffic Stimulation & Rural Call Completion proceedings



FTC Do-Not-Call Complaint Data

Active Registration and Complaint Figures¹

June 27, 2003 through September 30, 2016

Fiscal Year	No. of Active Registrations	Increase in Active Registrations	No. of Cumulative Complaints	Complaints Received Each Fiscal Year
2003	50,267,097	50,267,097	0	0
2004	61,741,124	11,474,027	579,838	579,838
2005	103,193,927	41,452,803	1,249,312	669,474
2006	126,981,844	23,787,917	2,399,130	1,149,818
2007	145,756,274	18,774,430	3,696,995	1,297,865
2008	166,582,471	20,826,197	5,464,793	1,767,798
2009	183,505,798	16,923,327	7,273,144	1,808,351
2010	192,917,741	9,411,943	8,906,957	1,633,813
2011	200,520,793	7,603,052	11,180,473	2,273,516
2012	207,938,719	7,417,926	15,021,029	3,840,556
2013	213,400,640	5,461,921	18,769,675	3,748,646
2014	217,855,659	4,455,019	22,010,761	3,241,086
2015	222,841,484	4,985,825	25,589,481	3,578,711
2016	226,001,288	3,159,804	30,929,715	5,340,234

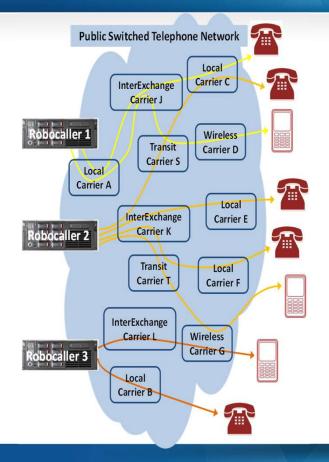
2015	300,000 complaints / month
2016	500,000 complaints / month
2017	600,000 complaints / month

~61% Robocalls

https://www.ftc.gov/system/files/documents/advocacy_documents/ftc-staff-comment-federal-communications-commission-supporting-fccs-proposed-expansion-provider/ftc_comment_to_fcc_re_nprm_noi_call_blocking_07032017.pdf

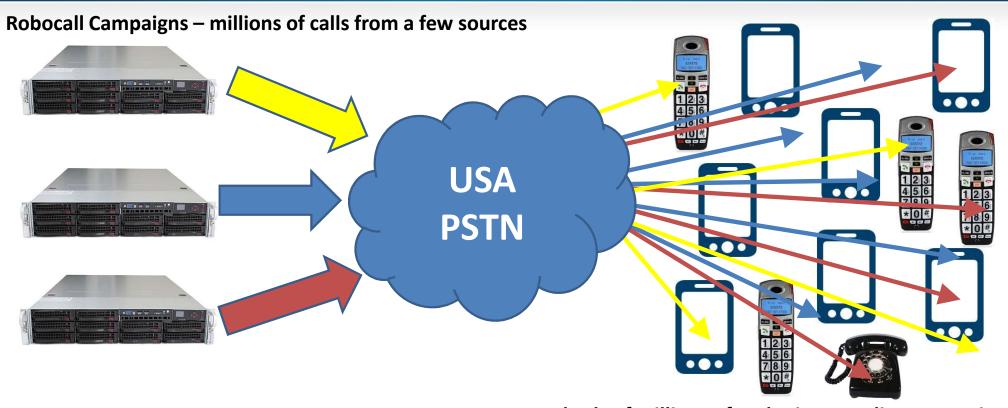
Active registration and complaint figures reflect the total number of phone numbers registered and the total number of National Do Not Call Registry complaints submitted to the FTC as of September 30, 2016.

Why Is It So Hard To Stop Robocalls?



- Calls go through multiple hops to reach consumer phones
- When the call arrives at the destination, the path taken by the call is not available
- The Caller-ID is usually spoofed; call origin is obfuscated
- Caller-ID can (and often does) change on a call-by-call basis so black-listing won't work reliably
- Robocallers purposefully route their calls in obscure ways to make themselves harder to find
- Tracing a call backwards today takes weeks or longer
- By then, the robocaller has done his damage and moved on
- Often illegal, but the robocaller can't be caught so doesn't care

Robocalls = Dandelions

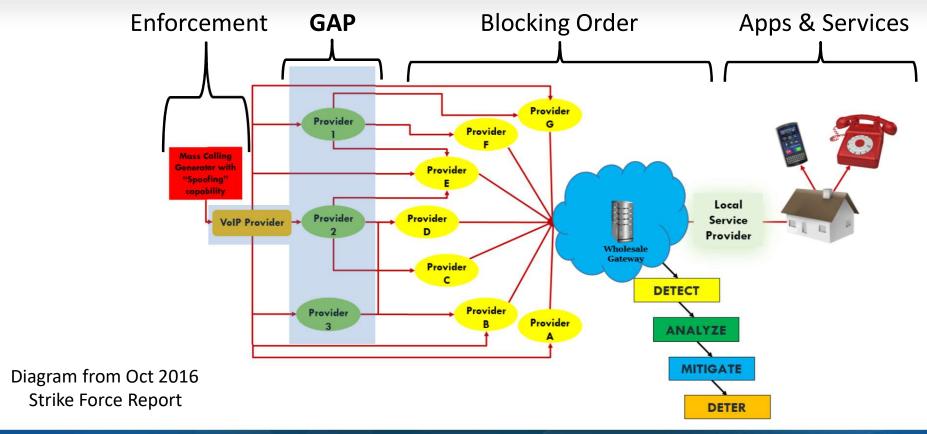


Hundreds of millions of endpoints needing protection

Proposal: Focus on VOLUME CALLERS

- Only a tiny fraction of callers need to rapidly make large volumes of calls
- A small number of volume callers account for the bulk of illegal robocalls
- ORIGINATING PROVIDERS see these calls at their source
- They can:
 - Limit availability of volume calling resources to documented customers
 - Tag each call so that the source can be readily identified (w/ existing signaling)
 - Report volume calling events to make it easier to detect problematic activity
- NOT expecting providers to determine what is legal vs. illegal

Robocall Choke Initiatives



ZipDX

Focus on the SOURCE of the Robocalls

- Every USA PSTN call enters the network through an ORIGINATING carrier
- Originating carriers have an opportunity to play a strategic role
 - See robocalls in aggregate
 - Observe particular patterns
 - Vet callers before they inflict too much damage
 - Encourage legit robocallers to play by the rules
 - Help shut down the biggest illegal abusers
 - Deter others from setting up illegal robocalling operations

Originating Provider Actions

- Allow volume calling on an EXCEPTION basis only
- Screen Caller-ID against a list of customer-specific values
- Make use of other EXISTING signaling elements:
 - Charge Number (SS7/ISUP, or SIP P-Charge-Info)
 - Redirecting Number (SS7/ISUP, or SIP Diversion)

31-Oct 2017

This will expedite traceback & make downstream apps more capable

Legitimate High-Volume Callers

- Of course there are legitimate, legal robocallers:
 - Debt Collection
 - Survey
 - Political
 - Notification (school, airline, drugstore)
- These customers will need higher calls-per-minute limits
- Generally they will NOT need Caller-ID flexibility
- Let customer document any request for relaxed rules

Calls Originating Overseas

- International calls enter USA PSTN via a USA gateway
- Typically, Caller-ID should reflect foreign origination (not +1)
- There are exceptions:
 - Other countries in NANP (e.g., Canada!)
 - Roaming mobile phones
 - Marked as mobile in LNP database
 - Low call rate
 - Call centers working on behalf of USA clients
 - Small universe of originating numbers
- Gateway Carrier can insert distinct Charge Number for traceability
- Gateway should insist that foreign operator respect USA requirements
 - Rate-limit calls to encourage elimination of garbage traffic

Benefits of Screened Caller-ID/ChargeNum

- Higher hurdles for illegal robocallers
- Better traceability leads to more efficient enforcement / deterrence
- Enhanced effectiveness of terminating call-blocking tools
 - Black and grey lists are much more meaningful
- New levels of consumer choice and control
 - Apps can better identify incoming calls & display associated info
 - Ability to invoke treatment for legal robocalls

Rural Call Completion Regulatory Model

- Regulatory requirement applicable to originating providers
 - Local carriers, IXC's, VoIP (interconnected and non-interconnected)
- Obligated to file relevant reports regularly to FCC
 - Identify sources of failures
 - Compare relative performance among providers
 - Exemptions avoid undue burden when frequent failures are unlikely
- Safe Harbor: Eliminate most likely problem source (minimize hops)
 - Filing requirement waived
- Result: Many carriers opted into safe harbor; call completion improved!

Next Steps

- Encourage Originating Providers to voluntarily implement best practices
- Initiate a Rule-Making
 - Industry participation via working workshop to refine & streamline
 - Starting point details in our 26-Oct Filing:
 https://ecfsapi.fcc.gov/file/1026001803270/ZipDX-17-59-WrittenExParte-Oct2017.pdf
- Get the biggest bang for the buck
 - Target first the highest volume campaigns
 - Don't burden providers that don't enable volume callers